

NOTES ON AUSTRALIAN COCCIDAE WITH DESCRIPTIONS OF  
NEW SPECIES.

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During the time I was engaged in writing the Descriptive Catalogue of the Australian Coccidae, published as Science Bulletins by the Department of Agriculture of New South Wales, I received and collected a large number of undetermined species of Coccids from all parts of Australia. Among them I have some remarkable forms that I propose to work out and publish under the heading of Notes on Australian Coccidae.

In 1898 the late W. M. Maskell described a new species of *Lecanium* from specimens discovered in a cavity in the stem of *Casuarina* in Victoria under the name of *Lecanium casuarinae*.

In my investigation into the habits of Coccids, I have on several occasions found *Lecaniums* or the remains of *Lecaniums* in the cavities in branches or tree-trunks of our forest trees, usually in those occupied by ants. As the inner surfaces of these cavities are hard, dry and sapless, the larvae can apparently develop into adult females with very little moisture or apparent food.

It is difficult to give adequate descriptions of these curious forms, because usually the adult females have become rounded, dry structures with all the appendages aborted and hidden in the brittle sack or bubble, which represents the final development of the adult coccid. Still there are characteristic differences in the three species dealt with that are sufficient to separate them. In two the larvae were found sheltering under the adult coccid shell.

LECANIUM EUCALYPTI, n. sp.

This coccid in all stages of development was found firmly attached to the hard corrugated surface of a cavity in the stem of a small eucalypt growing in the forest at Brooklana, Dorrigo, 10.2.1925. The surface of the cavity was coated with fine brown kino, and covered with a resting colony of small black ants (*Crematogaster* sp.).

Adult ♀ dark reddish-brown, almost black turning to rich reddish-brown when treated with potash, and showing a fine granulated structure. Form variable, but usually sub-globular, with the apical margin having the anal cleft showing in an oval process in a depression raised well up from the outer margin of the body, which fits closely against the wood. The whole might be likened to a round brown bubble contracted round the edges, about one-quarter of an inch in diameter and one-twelfth of an inch in height.